REMARKS

This communication is in response to the Office Action mailed on June 6, 2005. In the Office Action, claims 11-22 are pending. Also the specification has been objected to because of informalities.

The disclosure was objected to for containing an informality. With this Amendment, U.S. Patent No. 6,664,789 has been referred to in the Specification. As a result, withdrawal of this objection is requested.

Claims 11-15 and 17-20 were rejected under the judicially created Doctrine of Obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,429,658. Additionally, claims 16 and 21-22 were rejected under the Doctrine of Obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,429,658 in view of Mochizuki et al. (U.S. Patent No. 5,127,373). With this Amendment, Applicant's herewith file a Terminal Disclaimer to obviate the obviousness-type double patenting rejections. As a result, withdrawal of the rejections under the Doctrine of Obviousness-type double patenting is respectfully requested.

Claims 11-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura et al. (U.S. Patent No. 5,738,074) in view of Mochizuki et al. Of these claims, claims 11 and 17 are independent. Claim 11 has been amended to recite a Harley Davidson type engine. Similarly, claim 17 has been amended to recite a method of preparing a Harley Davidson type engine for checking the ignition timing thereof. Similar language was recited in the claims of U.S. Patent No. 6,429,658. A Harley Davidson type engine is well known, including engines made by Harley Davidson, Inc. of Milwaukee, Wisconsin as well as other companies that copy the engine. Applicant respectfully submits that neither Nakamura et al. or Mochizuki et al. teach or suggest using a sensor in a Harley Davidson type engine as

recited in independent claims 11 and 17.

Nakamura et al. describe an engine control system and method. Mochizuki et al. describe a two cycle engine with fuel injection. Nakamura et al. describe a crank angle sensor 63 that senses a position of a timing gear 62 that rotates with crank shaft 18. Mochizuki et al. describe a pressure sensor 48 that senses pressure within an associated chamber. In contrast to the features recited in the present claims, Nakamura et al. and Mochizuki et al. simply fail to teach or suggest utilizing a sensor in a Harley Davidson type engine.

In Harley Davidson type engines, sparks occur during compression and exhaust strokes. The threadable sensor recited in the present claims provides a sensor that is easily utilized to secure in a timing port. The sensor is innovative an solves well known problems related to timing Harley Davidson type engines. In particular, since the timing port is in the crankcase of Harley Davidson type engines, removal of the timing plug causes oil to exit the timing port, making it difficult to see the timing mark with a timing light as well as making a mess. The sensor recited in claims 1 and 17 provides a reliable sensor signal while preventing oil from exiting the crank case.

Nakamura et al. do not include any motivation to provide an alternative securing means for sensor 63 relative to timing gear 62. Additionally, the pressure sensor of Mochizuki et al. senses pressure in a chamber and is fundamentally different from the timing gear sensor of Nakamura et al. Such a combination would lead to multiple sensors (i.e. a pressure sensor and a timing gear sensor) and would simply not lead to the present invention. As a result, claims 11-18 are believed to be allowable over a combination of Nakamura et al. and Mochizuki et al.

Furthermore, applicant hereby demonstrates that the present invention as claimed achieves unexpected results, serves

a long-felt need and exhibits commercial success relative to the combination of Nakamura et al. and Mochizuki et al. Embodiments of the present invention as recited in the claims have received acclaim from motorcycle enthusiasts. Two independent articles reviewing the "Time Keeper" system point out the benefits and unexpected results of the present invention. The reviews from Hot Bike and American Iron Magazine were conducted independently. Ken Ross of Hot Bike magazine, notes "The Time Keeper from MST Instruments is the solution to achieving accurate timing while avoiding bathing in a spray of hot oil...". In addition, Fin Korhonen of American Iron Magazine professes that the Time Keeper "has the coolest, slickest, and most accurate (not to mention oil-free and easy as pie) way to time Harleys." In addition to demonstrating the unexpected benefits of the Time Keeper system, the Hot Bike and American Iron Magazine reviews demonstrate the long-felt need, commercial success and ease of use of the present invention.

In view of the foregoing, Applicant's respectfully submit that claims 11-22 are allowable and the present application is in condition for allowance. Reconsideration and allowance of the application is requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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